

The Per-User Pricing Trap: A Total Cost of Ownership (TCO) Analysis of Modern PBX Licensing

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Executive Summary

The widespread adoption of per-user, per-month licensing for Unified Communications (UC) and PBX systems, championed by many SaaS vendors, has introduced a significant and often-overlooked financial liability.

This model, while appearing to offer operational expenditure (opex) simplicity, inherently penalizes organizational growth, inflates costs through bundled feature tiers, and fails to account for the variable usage patterns of a modern workforce. Consequently, organizations find their telecommunications budget scaling unpredictably with headcount rather than actual system utilization.

This whitepaper presents a critical Total Cost of Ownership (TCO) analysis, contrasting the per-user model with the simultaneous-call (SC) licensing alternative. We will demonstrate through a 3-year TCO model that for the majority of growing businesses, the SC model provides a demonstrably lower TCO, superior budget predictability, and a more equitable alignment of cost to value by licensing for peak capacity, not employee count.

Introduction: The Hidden Costs of "Per-User" Licensing

In the last decade, the business telecommunications market has undergone a seismic shift from on-premise, capital expenditure (capex)-heavy hardware to flexible, cloud-based, operational expenditure (opex) "as-a-service" models. This shift, led by aggressive SaaS (Software-as-a-Service) vendors, introduced the "per-user, per-month" pricing model as its core financial hook.

On the surface, the appeal is undeniable. Vendors like RingCentral, 8x8, and, in its own way, 3CX, promise simplicity: a single, predictable fee for each employee, bundling software,

service, and support into one line item. For a finance department, this looks like a straightforward way to manage a variable cost.

However, this apparent simplicity masks a fundamental financial inefficiency. The per-user model aligns telecommunications costs directly with organizational headcount, not with the *actual consumption* of telecommunications resources. This creates a direct, linear, and often unnecessary correlation between workforce expansion and a rapidly inflating operational cost.

This whitepaper argues that for any organization not experiencing stagnation or high-churn, the per-user model is a financial trap. It is a structure that punishes growth, forces inefficient spending on low-utilization assets, and creates a costly barrier to accessing advanced features. We will analyze the flaws of this ubiquitous model and present a financially superior alternative: simultaneous call (SC) licensing. Through a detailed 3-Year Total Cost of Ownership (TCO) comparison, we will demonstrate how the SC model, as employed by platforms like VitalPBX, de-couples communication costs from headcount, providing budget predictability, feature inclusivity, and a TCO that is, in many cases, 90-95% lower than its per-user counterparts.

Chapter 1: The Flaw in the "Per-User" Model

The per-user licensing model is built on a premise that is fundamentally at odds with the reality of a modern, dynamic business: that every employee represents an equal, high-value unit of telecommunications usage. This flawed assumption manifests in three distinct financial drains.

The "Penalty on Growth"

The most significant flaw in the per-user model is its direct financial penalty on business growth. When a company operating on this model hires a new employee, the IT and finance departments must immediately provision a new license.

- **New Hire:** A salesperson is hired.
- **Immediate Cost:** A new \$30/month license is added. Annual cost: \$360.
- **New Hire:** A part-time administrative assistant is hired.
- **Immediate Cost:** A new \$30/month license is added. Annual cost: \$360.

The system makes no distinction between a high-volume power user (the salesperson) and a low-volume internal user (the assistant). The cost is identical. This model forces a CFO to accept a new, recurring, permanent charge for every single addition to the payroll.

For a company in a growth phase, this is financially toxic. A hiring plan to add 20 new staff over the next year is not just a payroll and benefits calculation; it is now burdened by an

additional \$7,200 in recurring annual software licensing costs, regardless of whether those new hires will even use the phone system. This linear cost-scaling disincentivizes agile growth and burdens the organization with a variable cost that is entirely divorced from variable *revenue or utility*.

The "Low-Use User" Problem

Expanding on the growth penalty, the per-user model has no mechanism to account for the diverse usage patterns of a modern workforce. It is a "one-size-fits-all" license that, in reality, fits almost no one perfectly.

Consider the typical "users" in a 100-person company:

- **Lobby & Reception Phones:** Used passively to greet visitors or transfer calls.
- **Conference Rooms:** Used for scheduled meetings, often with multiple participants but representing a single "user" license.
- **Warehouse & Shop Floor Phones:** Used intermittently for logistics or internal coordination, often by multiple people.
- **Part-Time Staff & Interns:** May only be in the office 10-20 hours a week.
- **Executives & Back-Office Staff:** Many of whom now live in collaboration platforms like Teams or Slack and rarely make external calls.

In a per-user model, each of these endpoints or individuals requires its own full-price license. The organization is forced to pay the same \$30/month for a conference room phone that is used twice a day as it does for a call center agent who is on the phone eight hours a day.

This represents a massive, quantifiable misallocation of resources. If 30% of a company's "users" fall into this low-use category, the organization is effectively wasting 30% of its telecommunications budget, every single month, with no recourse.

The Feature-Tier Trap

The final, and perhaps most insidious, flaw is the "feature-tier trap." Vendors structure their offerings to maximize revenue by segmenting critical features into progressively more expensive per-user bundles.

A common example, seen in models, looks like this:

- **"Standard" Tier (\$15/user/mo):** Basic calls, voicemail.
- **"Pro" Tier (\$25/user/mo):** Adds UC/collaboration, CRM integration.
- **"Enterprise" Tier (\$35/user/mo):** Adds advanced call center features (e.g., skill-based routing, advanced reporting, call recording).

An organization may be perfectly content on the "Pro" tier with 100 users. But the moment the business decides to formalize its customer support with a 5-person call queue, it encounters the trap. To get the "Enterprise" features for those 5 support agents, the vendor

demands that *all 100 users* be upgraded to the "Enterprise" tier.

Let's quantify this:

- **Cost Before:** 100 users x \$25/mo = \$2,500/mo
- **Cost After (for one feature):** 100 users x \$35/mo = \$3,500/mo
- **The "Trap" Cost:** An extra \$1,000 per month, or **\$12,000 per year**, for a feature that only 5% of the staff will use.

This model holds business-critical functionality hostage. It forces organizations to make an impossible choice: either overpay massively for features they don't need across the entire organization, or hamstringing their own operational development by foregoing those features entirely.

Chapter 2: An Alternative Model: Simultaneous Call Licensing

The financial drains inherent in the per-user model are not an unavoidable cost of doing business. They are an artificial construct of a sales model designed to maximize vendor revenue. A proven, financially superior alternative exists: Simultaneous Call (SC) licensing.

This model, which is the foundation of robust platforms like **VitalPBX**, reverts to a more logical and efficient paradigm. Instead of licensing *people*, you license *capacity*.

The logic is simple and aligns perfectly with other infrastructure planning. A company with 500 employees does not build a 500-space parking lot; it builds a 100-space lot designed to handle the *peak* number of employees who are in the office and driving at any one time.

Telephony follows the same statistical model. A 100-employee company will *never* have all 100 employees on an external call at the same exact moment. Decades of telecommunications data show that a typical business ratio is between 3:1 and 5:1 (employees to calls). Thus, a 100-employee office may only ever experience a *peak* of 20-25 simultaneous external calls.

The SC model allows you to purchase a license for exactly that: 25 simultaneous calls. You can still create 100, 200, or 500 user extensions. The number of users becomes irrelevant. The only metric that matters is peak capacity. This approach delivers three transformative financial benefits.

Benefit 1: Predictable Costs and Decoupled Scalability

Under the SC model, the telecommunications budget is immediately de-coupled from headcount. The cost becomes a predictable, fixed, and budgeted infrastructure expense, not

a volatile, headcount-driven opex liability.

When the 100-person company hires 20 new employees, the finance department's calculation is simple:

- **Cost Impact of 20 New Hires:** \$0.

As long as the company's peak usage remains below its 25-call capacity, it can add an unlimited number of users, extensions, and phones without incurring a single dollar in additional licensing costs. This provides true budget predictability and empowers the organization to grow agilely, knowing that a core infrastructure cost is fixed and under control.

Benefit 2: Fairness and Efficiency for All User Types

The "low-use user" problem is completely eliminated. In the SC model, the marginal cost of adding a new user is zero.

- **Conference Room?** Create an extension. Cost: \$0.
- **Lobby Phone?** Create an extension. Cost: \$0.
- **Part-Time Intern?** Create an extension. Cost: \$0.
- **Warehouse Phone?** Create an extension. Cost: \$0.

The system allows the organization to provision telecommunications resources rationally, based on operational need, not on a punitive per-unit cost. The value of the "power user" (the call center agent) and the "low-use user" (the conference room) are both captured within the same efficient capacity plan, and the organization only pays for the resource they both share: the simultaneous call path.

Benefit 3: All-Inclusive, Future-Proof Features

Perhaps most critically, platforms like VitalPBX that utilize the SC model typically do not engage in the "feature-tier trap." Their business model is not based on upselling you on features; it is based on providing a robust, complete platform for a fair capacity license.

This means that features considered "Enterprise" add-ons by per-user vendors are often included as standard:

- **Advanced Call Center & Queues:** Included.
- **Call Recording:** Included.
- **Advanced IVR:** Included.
- **CRM & Application Integration:** Included.
- **Unified Communications (UC) Clients (e.g., VitXi):** Included.
- **Video Conferencing:** Included.

This is transformative for strategic planning. An organization can deploy the system today for basic call needs, knowing that when it is ready to launch a sophisticated, skill-based customer service queue in six months, the software and features are already in place and paid for. The investment is future-proof, and the roadmap for operational improvement is no longer blocked

by a vendor's tollbooth.

Chapter 3: TCO Comparison (A 3-Year Analysis)

The conceptual benefits of the SC model are clear, but the financial impact is best illustrated with a direct, 3-year Total Cost of Ownership (TCO) comparison.

Case Study: "Company A"

- **Initial Size:** 100 employees
- **Growth:** Hires 20 new employees in Year 2 (120 total).
- **Usage Profile:** A statistical analysis reveals a peak usage of 20 simultaneous external calls.
- **Requirement:** In Year 2, the company wants to implement an advanced call queue for its 10-person support team (a feature typically in "Enterprise" tiers).

Scenario 1: "Per-User" Model (e.g., 3CX/RingCentral)

- **Pricing:** Based on typical mid-market "Pro" plans, we will use **\$25/user/month**.
- **"Enterprise" Tier:** To get the required call queue features, the price jumps to **\$35/user/month**.

Scenario 2: "Simultaneous Call" Model (VitalPBX)

- **Pricing:** Company A purchases a **25 Simultaneous Call (SC) license** to cover its 20-call peak with 25% headroom.
- **License Cost:** A VitalPBX Enterprise license for 25 SC is approximately **\$1,200 per year**.
- **Hosting:** We will budget **\$100/month** for a robust, high-availability cloud VM. Annual hosting cost: **\$1,200 per year**.
- **Note:** All call center, UC, and "Enterprise" features are included from Day 1.

3-Year TCO Comparison Table

Metric	"Per-User" Model (Vendor A)	"Simultaneous Call" (VitalPBX)
Year 1		
Users / License	100 Users @ \$25/mo	25 SC License + Hosting
Year 1 Cost	\$30,000	\$1,200 (Lic) + \$1,200 (Host) = \$2,400

Year 2		
Users / License	120 Users. Must upgrade all to "Enterprise" for call queue. 120 @ \$35/mo	120 Users. No license change needed. Peak usage still < 25.
Year 2 Cost	\$50,400	\$1,200 (Lic) + \$1,200 (Host) = \$2,400
Year 3		
Users / License	120 Users @ \$35/mo	120 Users. No license change.
Year 3 Cost	\$50,400	\$1,200 (Lic) + \$1,200 (Host) = \$2,400
3-YEAR TCO	\$130,800	\$7,200
Total 3-Year Savings	-	\$123,600

Analysis of Findings

The data is unequivocal. For a standard 100-employee business with modest growth, the 3-year TCO for the per-user model is **18 times higher** than the simultaneous call model.

The per-user model's cost scaled directly and painfully with both headcount and feature requirements, ballooning from \$30,000 to over \$50,000 annually.

The simultaneous call model's cost remained perfectly flat. It absorbed the 20% growth in staff and the addition of an advanced call center *with zero additional licensing fees*. The company's \$2,400 annual communications budget became a fixed, predictable, and highly efficient infrastructure cost.

The \$123,600 in savings is not a theoretical number; it is real, liquid capital that can be reinvested into R&D, marketing, or talent acquisition—rather than being siphoned off as pure-profit SaaS licensing fees to a vendor that penalizes its customers for succeeding.

Conclusion: Beyond Licensing - The Value of an Expert Partner

The financial case is clear. For any growing business concerned with long-term TCO and budget predictability, the simultaneous call licensing model is demonstrably superior to the per-user trap. It aligns cost with utility, rewards efficiency, and provides a future-proof platform for growth without financial penalty.

However, technology alone is only half of the solution. A powerful, flexible platform like VitalPBX delivers its maximum value when it is designed, deployed, and supported by an expert implementation partner.

Unlike "out-of-the-box" SaaS solutions that offer little more than a web portal, a true communications partner provides the critical expertise to make the system work for *your* specific business:

- **Proper Discovery:** Analyzing your actual call flow and usage to right-size your SC license and hosting.
- **Network Integration:** Ensuring your on-premise or cloud environment is optimized for crystal-clear voice quality.
- **Carrier Services:** Managing the complexities of SIP trunks and porting numbers to ensure a seamless transition.
- **Custom Configuration:** Building the advanced IVRs, call queues, and integrations that drive real business value.
- **Ongoing Support:** Providing a dedicated team of experts who understand your business and your system.

The SC model provides the superior financial framework, and an expert partner provides the technical and strategic execution to turn those savings into a competitive advantage.

About [Partner Company Name]

For over [X] years, **[Partner CompanyName]** has been a trusted leader in designing, implementing, and managing mission-critical telecommunications and IT infrastructure for businesses across [Your Industry/Region]. We believe that technology should be an asset, not a liability—a tool for growth, not a tax on it.

As a certified **Gold Partner for VitalPBX**, we specialize in migrating companies from expensive, restrictive per-user plans to flexible, high-performance, and low-TCO simultaneous call solutions. Our team of certified engineers provides end-to-end service, from initial TCO analysis to full deployment and 24/7/365 managed support.



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Stop paying the growth penalty. Contact us today for a free, no-obligation TCO analysis of your current phone system.

We will provide a confidential audit of your existing communications bills and architecture, and show you—in clear, undeniable financial terms—exactly how much you could save by switching to a modern, flexible VitalPBX solution.

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